M1043/0019

Leslie Heppler < lheppler@utah.gov>



#### **Draft Review -**

2 messages

Leslie Heppler < lheppler@utah.gov>

Mon, Apr 18, 2016 at 1:19 PM

To: Robert Hicken <robert@utahstone.com>, Cody Sweat <cody@utahstone.com>

Cc: Paul Baker <paulbaker@utah.gov>

The attached review is a draft copy of the OGM review of your latest submittal. The edited copy of the review will be finalized, signed and sent out as soon as possible. Certain portions of the review are incomplete at this time, due to either lack of information, incomplete information, or inconsistent data in the NOI.

It is the goal of OGM to send out the most thorough and detailed review possible as per R647-4-101. 1.

If you have any further questions please don't hesitate to call me at 801-538-5257 thx-lah

Utah Division of Oil, Gas & Mining Office hours - Mon thru Fri 8-5 (801) 538-5340 Leslie Heppler lheppler@utah.gov Direct line (801) 538-5257 (Mon -Thur)

Thank you for reading this electronic correspondence. Please consider the environment before printing.

REV2-7276-03242016.pdf 95K

Robert John Hicken <robert@utahstone.com>

<REV2-7276-03242016.pdf>

To: Leslie Heppler < lheppler@utah.gov>

Cc: Cody Sweat <cody@utahstone.com>, Paul Baker <paulbaker@utah.gov>

We will review and get back to you

Thank you

Robert John Hicken 435-640-5872 m www.utahstone.com [Quoted text hidden]

Mon, Apr 18, 2016 at 1:45 PM



April 14, 2016

Robert Hicken Mountain Valley Stone, Inc. 2276 South Daniels Road Heber City, Utah 84032

Subject: Second Review of Notice of Intention to Commence Large Mining Operations, Mountain

Valley Stone, Inc., Brown's Canyon Quarry, M/043/0019, Summit County, Utah

Dear Mr. Hicken:

The Division of Oil, Gas and Mining has reviewed the referenced Notice of Intention to Commence Large Mining Operations (NOI) which was received March 18, 2016. The attached comments need to be addressed before tentative approval may be granted.

The comments are listed under the applicable Minerals Rule heading; please format your response in a similar fashion. Please address only those items requested in the attached technical review by sending replacement pages for the NOI using redline and strikeout text. After the NOI is determined technically complete, the Division will request two clean copies of the complete and corrected plan. Upon final approval, both copies will be stamped approved, and one will be returned to you.

Please submit your response to this review by May 18, 2016. The Division will not approve further increases to the disturbed area until this NOI is approved.

The Division will suspend further review until your response to this letter is received. Please contact Leslie Heppler at 801-538-5257 or me at 801-538-5261 if you have questions regarding the review. Thank you for your cooperation in completing this permitting action.

Sincerely,

Paul B. Baker Minerals Program Manager

# Initial REVIEW OF NOTICEOF INTENTION TO COMMENCE LARGE MINING OPERATIONS

# Mountain Valley Stone Browns Canyon Quarry

## M/043/0019 April 14, 2016

## **General Comments:**

| Comment # | Sheet/Page/<br>Map/Table<br># | Comments   | Initials | Review<br>Action |
|-----------|-------------------------------|--|----------|------------------|
| 1         | General                       | The Notice should be formatted to easily incorporate additional revisions and amendments.  | lah      |                  |
| 2         | General                       | The Division may have additional comments based on the responses to this review.   | lah      |                  |
| 3         | General                       | The text discusses areas by lots numbers, but the maps refer to phase numbers.  Please be consistent and use the phase numbers throughout the text and all maps.   | lah      |                  |
| 4         | Appendix<br>E                 | Previous Comment - The Corps of Engineers preliminary determination has been provided, but the Division would like to know if an approved determination has been made yet.  New Comment - Plans may need modification pending the decision from the Corps of Engineers.  | mpb      |                  |
| 5         | Appendix<br>I                 | Previous Comment - Appendix I: The recommendations in the geotech report are a snapshot in time and need to be consistent with the text. Figure 7 has been modified and needs to be corrected.  New Comment – Section 109.4 of the text needs to refer to the geotechnical report. The text should note that the report was for slope conditions in June 2015. In addition, the text should note when any of the geotechnical properties of the rock or if | lah      |                  |
|           |                               | the phreatic surface changes, the stability will be reviewed and the operator will maintain an adequate factor of safety.  |          |                  |

## R647-4-104 - Operator Information and Surface and Mineral Ownership

| Comment # | Sheet/Page/<br>Map/Table<br># | Comments  | Initials | Review<br>Action |
|-----------|-------------------------------|---|----------|------------------|
| 6         | Page 9                        | Previous Comment - BLM had mineral rights on a portion of the land shown on Figure 2; this is inconsistent with page 9. Please provide a separate map showing mineral rights ownership (versus the surface rights). | lah      |                  |
|           |                               | New Comment – Please see BLM submittal to OGM on September 23, 2002 for M/043/0012 on our web page, <a href="https://www.ogm.utah.gov">www.ogm.utah.gov</a>   | lah      |                  |

#### R647-4-105 - Maps, Drawings & Photographs

105.3 - Drawings or Cross Sections (slopes, roads, pads, etc.)

| Comment<br># | Sheet/Page/<br>Map/Table<br># | Comments  | Initials | Review<br>Action |
|--------------|-------------------------------|---|----------|------------------|
| 7            | Figure 4a                     | All mining disturbance need to be included as per R-647-1-106, as the pale orange color of phase 1.   | lah      |                  |
| 8            | Figure 4a                     | Include acreages of Phase 1, Phase 2a, Phase 2b and Phase 3.  | lah      |                  |
| 9            | Figure 5                      | Section B-B show 2H:1V slopes, Figure 5 notes natural grade – please be consistent. Note on figure 5 should note "Backfill to a minimum slope angle of 2H:1V.                             | lah      |                  |
| 10           | Figure 4a, 5, 5a              | Show the location of the Wetland/waterways over Lost Creek on Figure 4a, 5, 5a, as shown on Figure 7.   | lah      |                  |
| 11           | Figure 7                      | Please add directional flow arrows to the map   | mpb      |                  |
| 12           | Figure 7b                     | Please correct location of the orange line to match the disturbance on the base map airphoto.   | lah      |                  |
| 13           | Figure 9                      | Please show the location of the geologic cross section, as a line on the geologic map.  | lah      |                  |
| 14           |                               | New Comment: The reported maximum mining depth of 6,420' is not consistent with the maximum depth elevations of the North Pit and South Pit excavations shown on Figure 6a and Figure 6b. | aa       |                  |

## R647-4-106 - Operation Plan

#### 106.1

| Comment # | Sheet/Page/<br>Map/Table<br># | Comments   | Initials | Review<br>Action |
|-----------|-------------------------------|--|----------|------------------|
| 15        | Page 13<br>Para 1             | Text notes figure 3 is a USGS topographic map, but figure 3 is an airphoto base with topographic contour lines, please correct the typo. | lah      |                  |

106.3 - Estimated acreages disturbed, reclaimed, annually

| Comment<br># | Sheet/Page/<br>Map/Table<br># | Comments   | Initials | Review<br>Action |
|--------------|-------------------------------|--|----------|------------------|
| 16           | Page 16                       | As noted above, Table 1 and 2 should refer to the mine phases versus the lot numbers. In addition on Table 1, please include explain the difference between the 61 acres total and the 37 acre total   | lah      |                  |
| 17           | Page 14                       | Previous Comment - Table 1 is labeled as"and over the life of the mine" but the table only shows the current disturbance. Please change the title of Table 1. Please include a table with the reclaimed acres or state in the text that no reclamation has begun and estimate the year it is anticipated to begin. | lah      |                  |
|              | Page 16 or 17                 | New Comment – Please include a table or verbiage in the text regarding the estimated annual reclaimed area. The totals for all should add up and be consistent.  | lah      |                  |

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| Comment # | Sheet/Page/<br>Map/Table<br># | Comments  | Initials | Review<br>Action |
|-----------|-------------------------------|---|----------|------------------|
| 18        |                               | Previous Comment - The operator mentions seasonal waterways in this section.  What are the seasonal waterways? Lost Creek? Please provide clarification by describing the water bodies in the region. Address any perennial streams, ephemeral streams, any springs and seeps in the permit area and the surrounding vicinity. Not addressed  Additional Comment - Please map the location of the observed seep located on lot 38 | aa       |                  |
|           |                               | on Figures 3, 4, 4a, and gives seeps approximate elevation.   | aa       |                  |
| 19        |                               | Additional Comment: Any mis-mapped water rights should also be noted on the Figure legend on Figure 7b.   | aa       |                  |

106.10 - Amounts of material moved (including ore, waste, topsoil, etc.)

| Comment #  | Sheet/Page/<br>Map/Table<br>#  | Comments   | Initials | Review<br>Action |
|------------|--|--|----------|------------------|
| 20 Page 20 | Page 20  | Previous Comment - Please include a chart or table with the amount of material to be moved. Include the volume of topsoil, the volume of decorative stone, engineered material stockpile, and the waste used for backfill. As written the statement notes the deposit continues at depth but doesn't clearly define the operator's intent. | lah      |                  |
|            | New Comment – Under section 106.10 include a statement of the estimated amounts of material to be moved. In addition, a statement regarding the depth of water to the depth of mining. | lah  |          |                  |

# R647-4-108 - Hole Plugging Requirements

| Comment # | Sheet/Page/<br>Map/Table<br># | Comments   | Initials  | Review<br>Action |
|-----------|-------------------------------|--|-----------|------------------|
| 21        |                               | Previous Comment - Please include costs for plugging the well in the reclamation cost estimate. A determination will be made at the time of reclamation whether the well needs to be plugged and abandoned.  | lah & pbb |                  |
|           |                               | New comment – Thank you for the cost to pull the pumps. In addition, include the costs of plugging of the hole (need 3 Independent bids). If in the future the well is transferred to Wright/Garff the bond will be returned to the mine operator. | lah       |                  |

109.1 - Impacts to surface & groundwater systems

| Comment # | Sheet/Page/<br>Map/Table<br># | Comments  | Initials | Review<br>Action |
|-----------|-------------------------------|---|----------|------------------|
| 22        | Figure 4a                     | Previous Comment - The proposed "Access Road" shown on this figure will impact a jurisdictional wetland and require a Section 404 Joint Permit filed with the Army Corps of Engineers and Utah State Engineers Office if fill will be used to construct the crossing. This can be avoided if the crossing can be spanned with a bridge that requires no fill. Please describe the proposed method to be used for the crossing.  | mpb      |                  |
|           |                               | New commet - The Corps documentation is good. Potential impacts to any wetlands can be costly to delineate, permit, and mitigate. As an alternative, I suggested a bridge span, with the idea of possibly using recycled flatbed railcars laid side-by-side to avoid wetland impacts altogether. They are relatively inexpensive and can likely be resold after their use for this operation. This is just a suggested alternative for internal cost analysis consideration. Thanks for your response.  | mpb      |                  |
| 23        | Section<br>109.1              | Previous Comment - Potential impacts to wetlands and natural drainage channels in and around the permit area were not analyzed in this section either. If potential impacts exist, a mitigation plan must be proposed. Information was presented in Section 107.2 & 3 regarding erosion control measures, but the mitigation information needs to be addressed under impacts. The operator states that they will follow the recommendations from the consultant and the Corps of Engineers, but those recommendations were not listed in the plan.                                      | aa       |                  |
| 22.50     |                               | New Comment: Mining on Lots 26 and 27 (Phases 2a, 2b and 3) are proposed to mine to a depth of 6420, which is below the elevation of Lost Creek. This indicates that potential impacts to Lost Creek are possible. MVS proposes a 50 foot set back buffer from the stream and will be modified if groundwater seepage is encountered. This item is conditionally approved provided that this 50-foot buffer is demarcated either with flagging or an adequate berm and that records be kept quarterly indicating groundwater seepage and provided to the Division upon site inspection. | aa       |                  |
| 24        |                               | NEW: The Summit County Land Use and Development Code require any soil disturbances to maintain a 25-foot setback from identified wetlands (Chapter 7, Section 7105). At the scale of the maps in the NOI, it is unclear if the disturbed area boundary encroaches on this setback or not. Please include a statement that these setbacks will be observed during the life of the operation.   | mpb      |                  |
| 25        |                               | Previous Comment -The northeast corner of the permit area shows a disturbance area that has affected the natural drainage channel that flows into Lost Creek. The proposed mine expansion area is on the west side of the current disturbance. Presumably, no additional mining will take place in this north east area. If this is correct, it should be reclaimed as soon as possible as required by rule R647-4-107.6 and in accordance with the standards in R647-4-111.2.  | aa       |                  |
|           |                               | New Comment - Statements made regarding the two culverts beneath the new road built in the "thumb" area, as it is referred to, are conflicting. Page 27 states the two 18" culverts will be installed in this area at reclamation while page 32 states that road culverts will remain in place until the road is removed.   | aa       |                  |

109.4 - Slope stability, erosion control, air quality, safety

| Comment # | Sheet/Page/<br>Map/Table<br># | Comments  | Initials | Review<br>Action |
|-----------|-------------------------------|---|----------|------------------|
| 26        | Page 23                       | Previous comment - More text is needed regarding slope stability and public safety. The geotechnical report is included as Appendix I, but it is not mentioned in the text. Please refer to the report and include the recommendations of the report. | lah      |                  |
|           | Page 32                       | New comment – Please refer to Appendix I and section R647-4-112 regarding slope stability of slope #5 (include max height and max angle). In addition, note that all other slopes will be backfilled to a 2H:1V.                                      | lah      |                  |

#### R647-4-110 - Reclamation Plan

110.2 - Roads, highwalls, slopes, drainages, pits, etc., reclaimed

| Comment # | Sheet/Page/<br>Map/Table<br># | Comments  | Initials | Review<br>Action |
|-----------|-------------------------------|---|----------|------------------|
| 27        | Page 24                       | Previous comment - Please add additional information on the reclamation of the dump areas. Specifically the slope angles of loose material, such as dumps and fill, must be graded to eliminate erosional hazards and to support the revegetation and the post mining land use. The geotechnical report discusses the slope angle of the fill slopes. | lah      |                  |
|           | Page 34                       | New comment - Under the highwall section please refer to slope #5 and section R647-4-112. In addition note that all other temporary highwals will be backfilled to the 2H:1V slopes shown in cross sections 6a and 6b.  | lah      |                  |

110.5 - Revegetation planting program

| Comment # | Sheet/Page/<br>Map/Table<br># | Comments   | Initials | Review<br>Action |
|-----------|-------------------------------|--|----------|------------------|
| 28        | Page 39                       | Previous comment - Yarrow, sagebrush, and forage kochia seed should be broadcast. This may be accomplished by putting these species in the smallest seed box, and then pulling the drop-tubes from this seed box to the disk openers - thus broadcasting these seeds while the rest of the mix is drilled.   | lk       |                  |
|           |                               | New comment - With regards to the use of fertilizers and soil amendments, The Division agrees that generally fertilizing (especially at agronomic rates) does more for weed establishment than benefitting the revegetation efforts. However, as per your soil analysis, nitrate nitrogen (the form plants can use) is very low. It is recommended that 25-40 lbs of a nitrogen fertilizer be applied (native rangeland soils should have close to 25ppm N at a minimum. | lk       |                  |

## R647-4-112 - Variance

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| Comment # | Sheet/Page/<br>Map/Table<br># | Comments   | Initials | Review<br>Action |
|-----------|-------------------------------|--|----------|------------------|
| 29        | Page 41                       | New - Appendix I is the supporting documentation for the request for variance. Variance statement needs to be written, as 2H:1V fill slope and 45 degree highwalls are with the rules and do not require a variance. The request for variance statement needs to concentrate on phase 1 slope #5 and the 53 degree slope angle. In addition the maximum height of the highwall to remain at 53 degrees needs to added to the request for variance. | lah      |                  |
|           |                               | New - In addition, the slope angle of the other phases have not been addressed. Either commit in the NOI to maintain highwalls at less than 45 degrees and fill slopes less than 2H:1V in the future phases or commit to provide a geotechnical report signed and stamped by the Engineer of record prior to excavation greater and 20 feet in depth from the original ground surface.   |          |                  |

# R647-4-113 - Surety

| Comment # | Sheet/Page/<br>Map/Table<br>#    | Comments   | Initials | Review<br>Action |
|-----------|----------------------------------|--|----------|------------------|
| 30        | Tank<br>Removal                  | New - Smaller tanks were combined into on tank of 5370 gallons for disposal but the cost of \$830 was not carried over to the far right column.  | whw      |                  |
| 31        | Surety summary                   | New - Please update to the 2016 escalation factor  | lah      |                  |
| 32        |                                  | New - Means number should be 02 65 10.30 0110 instead of 02 65 10 0110   | whw      |                  |
| 33        |                                  | New - Could not locate Means number 02 65 10.30 603. Last digits of Mean are usually 4 digits instead of 3.  | whw      |                  |
| 34        | 110.2<br>Highwalls               | Please state how highwalls will be brought into compliance and include the costs in the reclamation cost estimate. The reclamation plan says highwalls will be worked to maintain up to a 45-degree slope and stair-stepped, or the recommendations in the geotechnical report will be applied. There is nothing in the reclamation cost estimate that directly relates to highwalls.  | whw      |                  |
|           |                                  | Specifically – the highwall on section D-D will need to be laid back from the .95H:1V to 1H:1V or provide geotech report that the highwall will be stable.   | lah      |                  |
| 35        | Earthwork<br>Spread<br>Stockpile | Previous comment - The unit cost for spreading the soil stockpile is in 31 23 23 14 5000, and this is for a 300 horsepower bulldozer to push sand and gravel 50 feet. This assumes that stockpiles are an average of 50 feet from the area where the material will be deposited. Please show where the soil stockpiles are located, or increase the haul distance. If the haul distances are long then the material could be transported using trucks or excavators. | whw      |                  |
|           |                                  | New - Information not provided in bond costs. Location of stockpile of soil should be shown on maps to confirm that push distance is 50 feet.  | whw      |                  |